

- ILYSANTHES REFRACTA (Ell.) Raf. 341.  
 KICKXIA ELATINE (L.) Dumort.  
*Tursitis Elatine* (L.) Raf. 1159.  
*T. filifera* Raf. 1160.  
 LIMOSELLA SUBULATA Ives.  
*L. brachistema* Raf. [end of list above].  
 LINARIA CANADENSIS (L.) Dum.-Cours.  
*Antirrhinum canadense assurgens* Raf. 1139.  
 MACUILLAMIA ROTUNDIFOLIA (Michx.) Raf. 332.  
*M. obovata* Raf. 333.  
 MECARDONIA ACUMINATA (Walt.) Small.  
*Ambulia rigida* (Raf.) Raf. 325.  
 MELAMPYRUM LINEARE LATIFOLIUM (Muhl.) Beauverd.  
*M. lanceolatum* Raf. 1174.  
 SCOPARIA DULCIS L.  
*Ambulia micrantha* (Nutt.) Raf. 330.  
 SCROPHULARIA LANCEOLATA Pursh.  
 (?) *S. dimidiata* Raf. 1186.  
*S. leporella* Bickn.  
*S. pectinata* Raf. 1180.  
 Academy of Natural Sciences, Philadelphia.

## SHORTER NOTES

## NOTES ON A GROWTH OF YOUNG WHITE BIRCH.

HERBERT C. WICKENHEISER.

There is an interesting stand of very young white birch on the cinder filled swamp area at the south end of Van Cortlandt Park, facing Broadway, New York City. These trees appear to be in the main exceptionally well-formed, typical specimens of the common white birch, *Betula populifolia*, having even in this young stage the characteristic pyramidal form. They all seem vigorous and well rooted and are growing nicely. Their distribution over the filled-in swamp area is rather irregular, in some places none and in others covering the ground as uniformly as in a cultivated plot.

The material on which they grow can scarcely be spoken of as soil. It is very dry, fairly hard and compact, composed of mixed coarse and fine cinders, clinkers, ashes and charcoal with a little clayey soil in a few places.

The trees grow most plentifully on the higher and drier parts, there being few or none in the occasional shallow depressions where there is more soil and some stagnant water. These low areas are occupied by grasses, weeds and young willows. A broad, shallow stream of polluted water meanders across the field. The birches stand well back from this stream.

Some reasonably precise measurements gave the following results:—

The average height of the trees is twenty-four and a half inches. The tallest was forty inches and the smallest was four inches. The average thickness of the stems six inches above the ground was a little over one fourth of an inch. On several plots fifty feet square the number of trees averaged thirty-five. The total number of young birches over the entire field of about ten acres is about one thousand.

The tallest trees in the stand are five years old, which means that the earliest seeds took root on the plot the same season the filling in of the swamp was completed.

Interspersed irregularly among the birches are numerous small willows averaging twenty-seven inches in height. There are also many small locusts, some small-toothed aspens, poplars, bay-berry, etc., all very young growth. There is much clover, particularly in the hollows, and a great variety of weeds and a few typical marsh grasses.

No white birch trees grow anywhere in sight of this field but a small group of mature trees was found about half a mile to the north. There were about thirty-five of these trees, all well formed, healthy specimens about twenty feet in height. These trees might easily have supplied the seeds which gave rise to the young growth to the south as there is practically no obstruction between them.

Another more scattered stand of older white birches was found still farther to the north and west in Van Cortlandt Park. These trees are more numerous and larger than those already noted. They are growing on the north and north-west sides of a long wooded knoll interspersed with stalwart oaks, tall beeches, scrawny sumach and a few elms and maples. Their white

bark stands out in pleasing contrast with the darker hued trunks about them. Many of them are exceptionally well formed with full foliage. Their delicacy of forms calls to mind Lowell's admirable tribute:

"Their shadow scarce seems shade, their pattering leaflets  
Sprinkle their gathered sunshine o'er my senses  
And Nature gives me all her summer confidences."

New York City

## A NEW WEED FROM OREGON

JAMES C. NELSON

In the summer of 1920, Mr. William L. Teutsch, County Agricultural Agent for Lake County, Oregon, sent to the herbarium of the Oregon Agricultural College at Corvallis, specimens of a weed which had been found growing in great profusion in a field of alfalfa on the Lerwick ranch, three quarters of a mile north of Lakeview. Dr. Helen M. Gilkey, Curator of the College herbarium, kindly distributed some of these specimens among the other Oregon botanists. The plant was evidently a labiate, and a consultation of Bentham & Hooker's *Genera Plantarum* seemed to place it in *Salvia*; but it was beyond our powers to determine it among the six hundred and more species of that vast genus. We accordingly appealed to the Gray and National Herbaria, and our plant was identified at both of these institutions as *Salvia Aethiopsis* L., sometimes known as "African sage," a species previously unknown in Oregon.

Mr. Teutsch writes that the plant was not only very abundant in the heavy loam of the alfalfa-field, where it was actually choking out some of the alfalfa plants, but that it had spread to the adjoining (presumably unirrigated) hillside, and was growing in great profusion on a shallow basaltic soil, "indicating that it was a hardy plant and could withstand great drought," the semi-arid climate of Lake County permitting agricultural operations only with the aid of irrigation. It has continued at the same station until the present year (1922); is very prolific and is spreading rapidly. Mr. Teutsch is of the opinion that it may easily become a very noxious weed, though it has not yet appeared at any other station\*. It is a tall coarse plant,

\* Since writing this it has been found by Prof. M. E. Peck, at Gossil, Wheeler Co., about 200 miles north of the Lake Co. station